

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Claim 1. (Previously presented): A powder composition comprising at least one fat-soluble vitamin dispersed in a matrix consisting of an emulsion-forming composition selected from the group consisting of a natural polysaccharide gum, a mixture of polysaccharide gums, a protein, a mixture of proteins, and mixtures thereof, wherein the fat-soluble vitamin is present in the powder composition in the form of solid droplets having an average diameter of about 80 to about 120 nanometers (nm) and wherein the fat-soluble vitamin is present in the powder composition in the amount of from about 10% to about 30% by weight.

Claim 2. (Cancelled).

Claim 3. (Previously presented): The powder composition according to claim 1 wherein the polysaccharide gum is isolated from the group consisting of plants, animals and microbial sources.

Claim 4. (Previously presented): The powder composition according to claim 3 wherein the polysaccharide gum is selected from the group consisting of exudate gums, seaweed gums, seed gums, microbial gums, and mixtures thereof.

Claim 5. (Previously presented): The powder composition according to claim 3 wherein the polysaccharide gum is selected from the group consisting of gum arabic, flaxseed gum, ghatti gum, tamarind gum, arabinogalactan, and mixtures thereof.

Claim 6. (Previously presented): The powder composition according to claim 5 wherein the polysaccharide gum is gum arabic.

Claim 7. (Previously presented): The powder composition according to claim 1 wherein the protein is isolated from a plant or an animal source.

Claim 8. (Previously presented): The powder composition according to claim 7 wherein the protein is selected from the group consisting of sunflower proteins, soy-bean proteins, cotton seed proteins, peanut proteins, rape seed proteins, milk proteins, blood proteins, egg proteins, gelatine, crosslinked gelatine, and mixtures thereof.

Claim 9. (Previously presented): The powder composition according to claim 8 wherein the protein is gelatine.

Claim 10. (Previously presented): The powder composition according to claim 1 wherein the fat-soluble vitamin is selected from the group consisting of vitamin E or its esters, vitamin A or its esters, vitamin K (phytomenadione), vitamin D₃ (cholecalciferol), and mixtures thereof.

Claim 11. (Previously presented): The powder composition according to claim 10 wherein the fat-soluble vitamin is selected from the group consisting of vitamin E acetate, vitamin A acetate, vitamin A palmitate, and mixtures thereof.

Claim 12. (Previously presented): The powder composition according to claim 1 wherein the ratio of fat-soluble vitamin to matrix component is from about 1:99 to about 3:1.

Claim 13. (Previously presented): The powder composition according to claim 12 wherein the ratio of fat-soluble vitamin to matrix component is from about 1:8 to 1:1.

Claim 14. (Previously presented): The powder composition according to claim 1 wherein the composition comprises from about 60 to 85% by weight of a matrix component, based on the total weight of all the components present in the composition.

Claim 15. (Previously presented): The powder composition according to claim 14 wherein the composition has a moisture content of about 1-4% by weight.

Claim 16. (Cancelled).

Claim 17. (Previously presented): The powder composition according to claim 1, which is formed into a tablet.

Claims 18-27. (Cancelled).

Claim 28. (Previously presented) The powder composition according to claim 1 wherein the emulsion-forming composition is an oil-in water emulsion-forming composition.

Claim 29. (Currently amended): A powder composition comprising at least one fat-soluble vitamin dispersed in a matrix of an emulsion-forming composition selected from the group consisting of a natural polysaccharide gum, a mixture of polysaccharide gums, a protein, a mixture of proteins, and mixtures thereof, wherein the fat-soluble vitamin is present in the powder composition in the form of solid droplets, wherein the powder composition is produced by a process comprising:

(a) combining water with a matrix component selected from the group consisting of a natural polysaccharide gum, a mixture of polysaccharide gums, a protein, a mixture of proteins, and mixtures thereof, to form a solution;

(b) adding a fat-soluble vitamin to the solution to form a crude emulsion, wherein the fat-soluble vitamin is added in an amount to provide from about 10% to about 30% by weight fat-soluble vitamin in the powder composition;

(c) emulsifying the crude emulsion at a temperature of from about 5° C to about 75° C at a pressure of from about 10,000 psi (about 680 bar) to about 60,000 psi (about 4080 bar), to obtain an emulsion in which the droplets have an average diameter of about ~~70 to about 200~~ 80 to about 120 nm; and

(d) drying the emulsion to obtain the powder composition.

Claim 30. (Previously presented): The powder composition according to claim 29, wherein the crude emulsion formed has a solids content of from about 30%(wt) to about 50%(wt).

Claim 31. (Previously presented): The powder composition according to claim 29, further comprising mixing the crude emulsion prior to emulsifying, to provide a crude emulsion having droplets which are about 1500 nm or less.

Claim 32. (Cancelled).

Claim 33. (Previously presented): The powder composition according to claim 29, wherein the emulsifying occurs at a pressure of from about 20,000 psi (about 1,360 bar) to about 35,000 psi (about 2380 bar).

Claim 34. (Previously presented): The powder composition according to claim 29, wherein the emulsifying occurs at a pressure of about 25,000 psi (about 1,700 bar).

Claim 35. (Previously presented): The powder composition according to claim 29 wherein the emulsion-forming composition is an oil-in water emulsion-forming composition.

Claim 36. (New): A powder composition consisting of at least one fat-soluble vitamin dispersed in a matrix consisting of an emulsion-forming composition selected from the group consisting of a natural polysaccharide gum, a mixture of polysaccharide gums, a protein, a mixture of proteins, and mixtures thereof, wherein the fat-soluble vitamin is present in the powder composition in the form of solid droplets having an average diameter of about 80 to about 120 nanometers (nm) and wherein the fat-soluble vitamin is present in the powder composition in the amount of from about 10% to about 30% by weight and wherein the composition has a moisture content of about 1 to 4% by weight.

Claim 37. (New): A powder composition consisting essentially of at least one fat-soluble vitamin dispersed in a matrix consisting of an emulsion-forming composition selected from the group consisting of a natural polysaccharide gum, a mixture of polysaccharide gums, a protein, a mixture of proteins, and mixtures thereof, wherein the fat-soluble vitamin is present in the powder composition in the form of solid droplets having an average diameter of about 80 to about 120 nanometers (nm) and wherein the fat-soluble vitamin is present in the powder composition in the amount of from about 10% to about 30% by weight and wherein the composition has a moisture content of about 1 to 4% by weight.